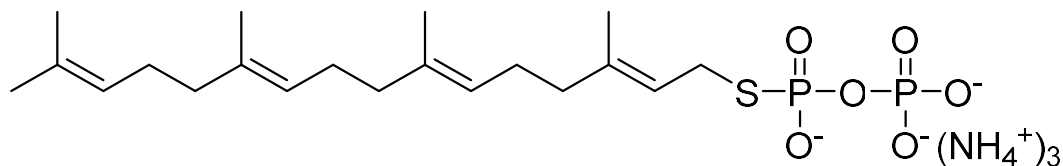


Geranylgeranyl S-thiolodiphosphate (GGSP)

Catalog number: I-S200



Molecular Formula: C₂₀H₄₅N₃O₆P₂S

MW: 517.60

CAS#: 373597-46-7

Solubility: water or methanol, >1 mg/mL

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: Geranylgeranyl S-thiolodiphosphate (GGSP) is an analog of GGPP in which the non-bridging oxygen has been replaced by sulfur resulting in a less-reactive compound.

References: 1) Phan, R. M. and C. D. Poulter (2001). "Synthesis of (S)-Isoprenoid Thiodiphosphates as Substrates and Inhibitors." *The Journal of Organic Chemistry* 66(20): 6705.

2) Lin, F-Y., Liu, C-I., *et al.* (2010) "Mechanism of action and inhibition of dehydrosqualene synthase" *Proc. Nat. Acad. Sci. USA* 107(50), 21337-21342.

3) Tomita, T., Kim, S-Y. (2017) "Structural insights into the CotB2-catalyzed cyclization of geranylgeranyl diphosphate to the diterpene cyclooctat-9-en-7-ol" *ACS Chem. Biol.* 12(6), 1621-1628.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

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Technical Data Sheet, Rev 1, 5/7/24– **For research use only.** Not intended for diagnostic or therapeutic use.

